



# What's new in popular culture, ICT, media & education?



Moderation Day, 7 March 2017  
Lindy Hathaway  
Teacher librarian  
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# Apple Park

- New headquarters in Cupertino, California aka “Spaceship Campus”
- 12 000 employees will move in from April 2017
- Steve Jobs Theatre - located on a hill - for product launches
- One of the most energy-efficient buildings in the world - run entirely on renewable energy
- Walking & running paths for employees, plus an orchard, meadow and pond within the ring



<http://www.macworld.co.uk/feature/apple/52-facts-about-apples-spaceship-campus-february-drone-video-3489704/>

# Apple less extraordinary?

- Apple still depends on iPhone popularity
- Has the revolution moved to Tesla?
- Apple television, Apple car have not eventuated



[https://www.crn.com.au/feature/apple-is-looking-less-extraordinary-after-losing-chris-lattner-and-matthew-casebolt-to-tesla-451305?eid=4&edate=20170224&utm\\_source=20170224&utm\\_medium=newsletter&utm\\_campaign=daily\\_newsletter](https://www.crn.com.au/feature/apple-is-looking-less-extraordinary-after-losing-chris-lattner-and-matthew-casebolt-to-tesla-451305?eid=4&edate=20170224&utm_source=20170224&utm_medium=newsletter&utm_campaign=daily_newsletter)

# Job hunting robots

- Stephen Hawking - “the rise of AI is likely to extend job destruction deep into the middle classes, with only the most caring, creative or supervisory roles remaining”
- Elon Musk - “ there will be fewer and fewer jobs that a robot cannot do better than a human”
- Bill Gates - governments should start taxing robot workers



[https://www.good.is/articles/automation-elon-musk-bill-gates-jobs?utm\\_source=thedailygood&utm\\_medium=email&utm\\_campaign=dailygood](https://www.good.is/articles/automation-elon-musk-bill-gates-jobs?utm_source=thedailygood&utm_medium=email&utm_campaign=dailygood)

- Amazon's 'salespeople' are its algorithm-powered recommendation engines
- Automation in restaurants - taking orders, serving, washing up, food prep
- Pizza trucks - drive around and start baking pizzas as orders come in

- Elon Musk - we should adopt universal basic income. This would allow the economy to continue as millions of workers are displaced by automation.



# Self-driving cars - the future?

- Currently in the US: 600 000 Uber drivers, 181 000 taxi drivers, 673 000 bus drivers, 1 million truck drivers
- Uber has bought a self-driving truck company
- World's largest retailer Amazon is testing a store with no employees - customers walk in and select goods and walk out



[https://www.good.is/articles/automation-elon-musk-bill-gates-jobs?utm\\_source=thedailygood&utm\\_medium=email&utm\\_campaign=dailygood](https://www.good.is/articles/automation-elon-musk-bill-gates-jobs?utm_source=thedailygood&utm_medium=email&utm_campaign=dailygood)

# Robot baristas!

- Serving coffee at San Francisco's Cafe X - the world's first automated cafe
- Just under \$3 a cup
- Founder Henry Hu found baristas spent a majority of time moving cups around, so he decided to make a fully mechanised coffee shop
- Order via the app or the ordering station

- Do you still need to tip?



<http://abc7news.com/technology/robot-baristas-serve-coffee-at-san-franciscos-cafe-x/1728812/>

# How to prepare yourself for the future of work

- People skills will continue to be in high demand - machines have no empathy and emotional intelligence (EI) plays a role in everything
- Critical thinking is crucial
- Creative thinkers add value and new perspectives
- Virtual collaboration skills to communicate with teams located elsewhere
- Adaptability and insight are more important than talent
- Digital and media literacy and predicting trends will be paramount
- Upset the status quo

<https://medium.com/the-mission/how-to-prepare-yourself-for-the-automated-future-107ed5bc763#.8s2gmzk0x>



# Mark Zuckerberg's robot butler Jarvis

- For his personal challenge in 2016, Zuckerberg wanted to build a simple AI to run his home
- He spent 100 hours building Jarvis
- For assistants like Jarvis to be able to control everything in homes, we need more devices to be connected and common standards for the devices to talk to each other
- Controlling everything from a smartphone was imperative



Excellent video of Mark and Jarvis:

<http://www.recode.net/2016/12/19/14008196/mark-zuckerberg-jarvis-butler-robot-house-facebook>

<https://www.facebook.com/zuck/posts/10103385178272401>

- Zuckerberg chooses to mostly text Jarvis using a Facebook Messenger bot, rather than speak to him
- The volume of text messaging around the world is growing much faster than the volume of voice communication
- Future AI products cannot be solely focused on voice

- He predicts that in 5-10 years AI systems will be more accurate than people for each of our senses as well as language



<https://www.facebook.com/notes/mark-zuckerberg/building-jarvis/10103347273888091/>

# Fake news

- Politicians and the media have created a post-truth world but it seems the young don't even seem to care
- Stanford University study - 80% of middle-school pupils could not tell an online news story apart from a piece of advertising sponsored by a bank and 33% of high-schoolers endorsed a fake news tweet about Trump's polling data
- Uni students did little better
- 'Young people's ability to reason about information on the internet is bleak'
- 'Authority' is no longer revered - if there is no universal authority and everything you read is flawed, you may as well just read things you agree with.

<http://www.theaustralian.com.au/business/media/fake-news-children-of-the-internet-happy-to-live-a-lie/news-story/0045fccc0724b8f8e1389202aef82c14>



- Our appetite for truth has died in the post-truth world and we must get it back
- Teach young people source criticism, statistics & cognitive bias - get them to listen to things they don't want to hear and to mistrust the voice that says something must be right



# Google and Facebook should pay for content!

- Senator Nick Xenophon believes news organisations, publishers and TV networks should be given the right to charge a content fee for Facebook and Google publishing their stories and videos
- Protecting media companies is a crucial part of safeguarding democracy and open debate
- In the US, most of the spending on digital ads goes to Facebook & Google



<http://www.theaustralian.com.au/business/media/digital/xenophon-bid-to-charge-facebook-and-google-for-content/news-story/d5c5cdf7142b319ad7b8fd7c7bd9fc54>

# Newspapers - online or digital?

- Uni of London study - UK newspapers engage each online visitor for less than 30 sec/day, but their print readers for 40 mins
- Time spent reading print and online newspapers doesn't vary much between countries
- The Guardian - declines in digital revenue
- Online wins with breaking news
- Fairfax was expected to switch weekday editions to digital only, but is continuing with daily papers 'for some years yet'

<http://www.businessinsider.com.au/fairfax-will-print-its-newspapers-daily-for-some-years-yet-2017-2>



<http://www.theaustralian.com.au/business/media/newspapers-may-be-challenged-but-readers-refuse-to-let-them-die/news-story/8f201dc95f56cf45331e77b718c9586d>

# 2016: the worst year for print

- The Australian - increased weekday readership; decreased Sat
- SMH - decreased M-F and Sat
- Canberra Times - decreased M-F and weekend
- Aust. Geographic - 31% increase (591 000)
- Big Issue - 35.9% increase (231 000)
- Hyper - 6.9% increase
- New Scientist - 26.8% increase
- Time - 18.2% increase (350 000)
- Rolling Stone - 11.5% increase (232 000)
- Frankie - 6.6% increase (340 000)



<http://www.roymorgan.com/industries/media/readership/newspaper-readership>

<http://www.roymorgan.com/industries/media/readership/magazine-readership>

# IoT - Internet of Things

- Telstra to build national IoT mobile network and will upgrade optical networks and trial 5G
  - Everyday devices eg. sprinklers, cars and fridges can be connected to the internet
  - Other uses include medicine, transport, mining, agriculture, utilities...
- Telstra has located wifi hotspots at 4000 payphones since 2014
  - Telstra Air wifi network in 650 000 hotspots
  - New York is replacing 7500 payphones with wifi hotspots that have an Android tablet supplied - with many problems
- <http://www.theaustralian.com.au/business/technology/wifi-comes-to-the-rescue-as-payphones-face-last-calls/news-story/711a9f4f786897ef1d455a74116d9b3b>
- 



<http://www.theaustralian.com.au/business/technology/wifi-comes-to-the-rescue-as-payphones-face-last-calls/news-story/711a9f4f786897ef1d455a74116d9b3b>

[https://www.crn.com.au/news/telstra-to-build-australias-first-national-internet-of-things-network-452693?eid=4&edate=20170227&utm\\_source=20170227&utm\\_medium=newsletter&utm\\_campaign=daily\\_newsletter](https://www.crn.com.au/news/telstra-to-build-australias-first-national-internet-of-things-network-452693?eid=4&edate=20170227&utm_source=20170227&utm_medium=newsletter&utm_campaign=daily_newsletter)



# NBN

- NBN will be 50% complete in 2017, with 5.4 million connections to homes and businesses by 30 June
- The network should be completed by 2020
- More than 70% of connections have been deployed to regional and rural areas - more metropolitan will be next



<https://www.crn.com.au/news/nbn-nearly-50-complete-447829>

# Australia's internet speed

- Akamai State of the Internet Report - quarterly analysis of global internet speed, availability and IPv6 adoption
- Australia has slipped again to 50th place - average speeds of 9.6 Mbps (Thailand and Kenya are over 11 Mbps)
- A quarter of our population receive speeds below 4 Mbps

Top countries: South Korea (26.3), Hong Kong (20.1), Norway (20), Sweden (19.7), Switzerland (18.4)

<https://www.lifehacker.com.au/2017/01/its-official-australian-internet-speeds-are-terrible-infographic/>

# Flexible smartphone screens

- Fully flexible smartphone screen by Japan Display could usher in the era of bendable electronics
- Plastic on both sides of the liquid crystal layer
- For devices to be truly flexible, batteries etc must also be flexible
- Low power consumption - available 2018
- 'Retro tech' becoming popular eg. colourful version released of the Nokia 3310 (year 2000) - but only for the old 2G network



<http://www.theaustralian.com.au/business/technology/meet-japan-displays-fully-flexible-smartphone-screen/news-story/075647d8f1ba76d06f0743199862a377>

# The new English AlphaBIT

Our alphabet is transforming into an alphaBIT with letters and numbers and emoticons and emoji



# Top 100 tools for learning - Jane Hart

- Since 2007 - annual list in October each year
- 1238 contributors from 64 countries (6% primary/secondary teachers)
- Twitter loses #1 spot after 7 yrs
- A-Z list of top tools 2007-2016



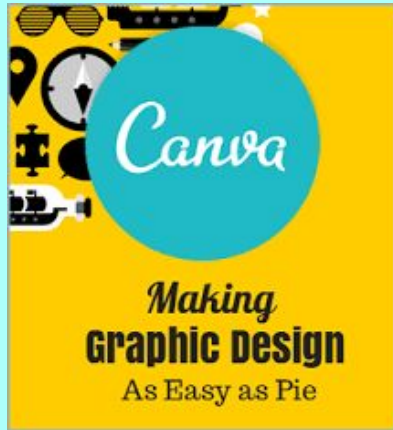
## Top 200 tools for learning

- 1.YouTube
- 2.Google Search
- 3.Twitter
- 4.Powerpoint
- 5.Google Docs/Drive
- 6.Facebook
- 7.Skype
- 8.Linkedin
9. WordPress
10. Dropbox
11. Wikipedia

<http://c4lpt.co.uk/top100tools/top-200-tools-for-learning/>

## Top 100 tools for education

1.YouTube 2.Google Docs/Drive  
3.Powerpoint 4.Google Search  
5.Twitter 6.Dropbox 7.Prezi 8.Kahoot  
9.Powtoon 10.Word



<http://c4lpt.co.uk/top100tools/top100-edu/>

## Top 100 tools for personal learning

1.Google Search 2.YouTube  
3.Twitter

Also includes: duolingo (learn languages); Canva (graphic design); Slack (team collaboration); SoundCloud (audio platform)

<http://c4lpt.co.uk/top100tools/soundcloud/>

# Switched off students

- Switched off students are as bad as rowdy students
- More are fiddling with their phones, making snide comments and turning up late than are swearing at teachers or threatening classmates (Grattan Institute)
- Major hidden issue - many students are compliant in class but are passively disengaged from school



<https://www.theguardian.com/australia-news/2017/feb/05/almost-half-of-australian-school-students-bored-or-struggling-say-s-grattan-institute>

- 40% of Australian students are regularly unproductive, bored and struggling to keep up with their peers
- Reasons - boredom, work is too hard, work is not challenging enough, poor quality teaching, problems at home
- An education system overhaul is required to deal with widespread student disengagement

- Recommendations - higher expectations for students; stronger teacher-student relationships based on mutual respect; encouraging active learning; encouragement; praise; not using 'old-fashioned discipline'

<https://www.theguardian.com/australia-news/2017/feb/05/almost-half-of-australian-school-students-bored-or-struggling-say-s-grattan-institute>



# Evidence for Learning

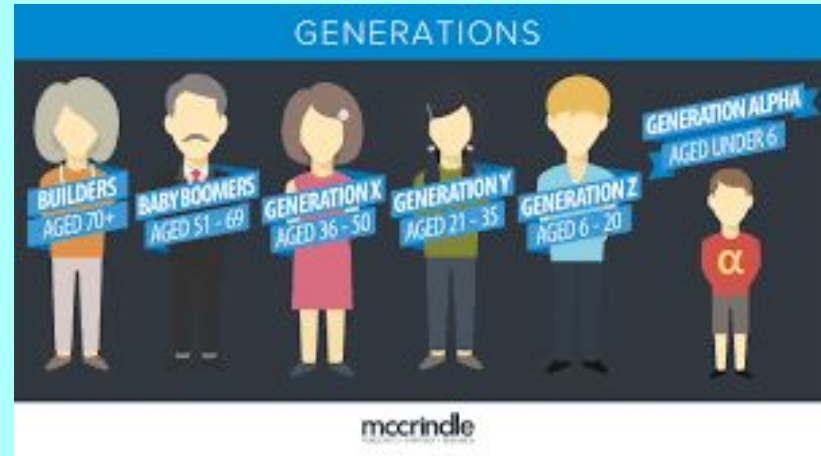
- Evidence for Learning ‘helps great practice become common practice in Australian schools’.
- 100% independent
- Australasian research summaries - evidence on Australian education approaches
- Teaching and learning toolkit - global evidence summaries of 34 education approaches
- Practical support to help implement what works
- Learning Impact Fund - used to support programs



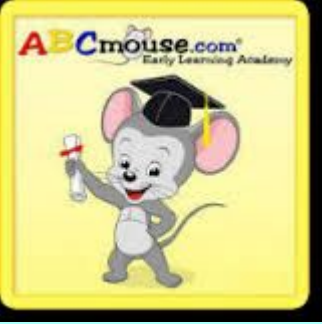
<http://evidenceforlearning.org.au/>

# Generation Alpha: children of Millennials

- Born since 2010 and until 2025
- The most materially endowed and technologically literate generation to date
- Greater chance of growing up overindulged, selfish and expecting instant gratification
- Generation Z and Gen Alpha prefer communication via images and voice control, over typing and texting



<https://www.forbes.com/sites/christinecarter/2016/12/21/the-complete-guide-to-generation-alpha-the-children-of-millennials/#1db0079a3623>



# Gen Alpha

- ABCmouse app - one of the most downloaded and highest-grossing apps since 2015 (Age of Learning platform exclusively targets Gen Alpha)
  - They are social influencers (Charli's Crafty Kitchen - a 7r old and a 10 yr old; 29 million views pm; \$127 000 ad revenue pm)
  - Better at multitasking
  - Shorter attention spans
  - “Screenagers” - they have had screens from the youngest age
  - They will be urban rather than suburban and will work in jobs that don't exist yet
- <http://marketingexec.com.au/meet-gen-alpha-the-future-consumer/>
- <https://www.forbes.com/sites/christinecarter/2016/12/21/the-complete-guide-to-generation-alpha-the-children-of-millennials/#1db0079a3623>



# Curious Canberra



- Begun 2016
- Contribute a question for an ABC reporter to investigate!
- Vote for questions

Topics include:

- Why does Canberra have a beach?
- Why are the streets in Canberra so dark?
- When the zombie apocalypse occurs, what places in Canberra will be the safest?
- Why are Canberra's fire engines yellow?
- Are Canberra's iconic bus shelters found anywhere else?

<http://www.abc.net.au/news/specials/curious-canberra/>

# The Book of Dust - Philip Pullman

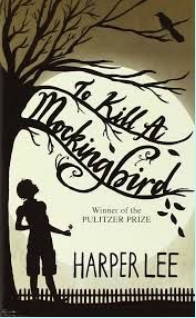
- Due 19 October 2017
- 'Equal' to His Dark Materials trilogy
- First book will be set 10 years before, when Lyra is a baby
- Books 2 and 3 will be set 10 years after, when Lyra is a young woman
- His Dark Materials - BBC series (8 eps) in development

<http://www.digitalspy.com/tv/cult/feature/a789641/his-dark-materials-bbc-tv-series-casting-characters-start-date-everything-you-need-to-know/>



<https://www.theguardian.com/books/2017/feb/17/first-instalment-of-new-philip-pullman-trilogy-the-book-of-dust-out-in-october>

<https://www.theguardian.com/books/booksblog/2017/feb/15/philip-pullman-the-book-of-dust-jk-rowling-magic>



# The most popular book each year 1930-2016

- 1937 - Of mice and men
- 1939 - The grapes of wrath
- 1948 - The diary of a young girl (Anne Frank)
- 1952 - The catcher in the rye
- 1958 - Lolita
- 1960 - To kill a mockingbird
- 1967 - Rosemary's baby
- 1972 - Jonathan Livingstone Seagull
- 1977 - The thorn birds
- 1983 - The color purple
- 1989 - The Satanic verses
- 1993 - The bridges of Madison county
- 1999 - Harry Potter and the chamber of secrets
- 2003 - The Da Vinci code
- 2008 - Twilight
- 2013 - Gone girl
- 2015 - The girl on the train

<http://forreadingaddicts.co.uk/literature/read-popular-book-year-born/16633>



# Good films and TV

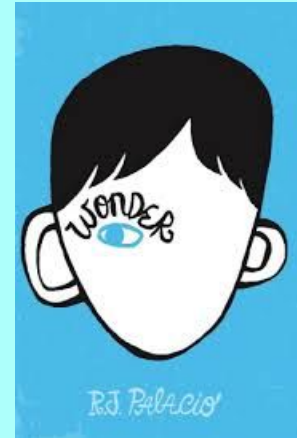


- Jasper Jones
- Hidden figures
- Lion
- Moonlight
- Hacksaw Ridge
- La la land
- Arrival
- Tanna
- Zootopia
- Kubo and the two strings
- Moana
- Blue water empire
- The warriors
- Bullied - Ian Thorpe
- Cyberhate - Tara Moss
- My Year 12 life
- Cleverman
- Art bites
- You can't ask that
- Stop laughing this is serious
- Anh's brush with fame

# Books to read before the film comes out in 2017

- Wonder - R.J.Palacio
- Before I fall - L. Oliver
- The zookeeper's wife - D. Ackerman
- The circle - Dave Eggers
- The dark tower - S. King
- It- Stephen King
- Murder on the Orient Express - A. Christie
- Captain Underpants - D. Pilkey
- The handmaid's tale - M. Atwood (TV)
- The snowman - J. Nesbo
- Annihilation - J. Vandermeer
- American gods - N. Gaiman (TV)

<http://www.elle.com/culture/books/g29305/movies-based-on-books-2017/>





# Google Translate

- Translates over 140 billion words each day
- Supports 103 languages
- Now uses Neural Machine Translation Artificial Intelligence and works on entire sentences for 8 of the most common language pairs
- Also relies on contributions from the Translate Community



<https://blog.google/products/translate/found-translation-more-accurate-fluent-sentences-google-translate/>

# Words of the Year 2016

- Macquarie Dictionary - **fake news**. Honourable mentions to **enby** and **halal snack pack**.
- Oxford Dictionaries (US and UK) - **post-truth**. Other popular words: **hygge**, **chatbot**
- Merriam-Webster - **surreal**
- Collins Dictionary - **Brexit**. Other popular words: sharenting, JOMO, mic drop
- American Dialect Society Emoji of the Year - **fire** (exciting)

